

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amending): A microprobe for testing an electronic device, ~~the microprobe~~ comprising:

a silicon substrate, ~~whose one side~~ having an etched side and a second side being opposite said etched side, said etched side being is etched in a certain depth, said second side having a via hole ~~in another side~~;

a conductive layer ~~that filled the via~~ filling said hole;

a cantilever ~~type~~ conductive spring unit electrically connected to the said conductive layer, wherein ~~one edge portion of the spring unit~~ said cantilever conductive spring unit having a first edge portion that is supported only on the on a surface adjacent to the via said hole and the other portion a remainder of the spring unit said cantilever conductive spring unit is spaced from the etched surface of the silicon substrate said etched side; and

a conductive tip portion formed on ~~the other~~ a second edge portion of the spring unit said cantilever conductive spring unit.

Claim 2 (Currently amending): The microprobe of claim 1, wherein ~~the spring unit~~ said cantilever conductive

spring unit is made ~~of any one of~~ of a material being selected from the group consisting of copper, nickel, nickel-tungsten, nickel-chromium, tungsten, ~~and various kinds of alloys~~ a plating alloy, and any combinations thereof.

Claim 3 (Currently amending): The microprobe of claim 1, wherein ~~the tip portion~~ said conductive tip portion is made of a material being selected from the group consisting of any one of copper, nickel, nickel-tungsten, nickel-chromium, tungsten, ~~and various kinds of~~ a plating alloys alloy, and any combinations thereof.

Claim 4 (Currently amending): The microprobe of claim 1, wherein further comprising a seed layer ~~is~~ formed between ~~the spring unit~~ said cantilever conductive spring unit and ~~the~~ said conductive layer, said seed layer in the same pattern as the spring unit, being electrically connected to said conductive layer, wherein said seed layer has a first edge portion that is supported on a surface adjacent to said hole and a remainder of said seed unit is spaced from said etched side.

Claim 5 (Currently amending): The microprobe of claim 4, wherein ~~the~~ said seed layer is made ~~of any one of~~ a material being selected from the group consisting of titanium-gold, titanium-copper, chromium-gold, ~~and chromium-copper,~~ and any combinations thereof.

Claim 6 (Currently amending): A method of manufacturing a microprobe for testing an electronic device, comprising the steps of:

forming a ~~via~~ hole in a portion of a silicon substrate;

forming a first conductive layer in ~~the via~~ said hole;

~~after~~ forming an opening on a portion of ~~one~~ a surface of the said silicon substrate;

forming a seed layer on ~~the an~~ an exposed portion of said silicon substrate in ~~the~~ said opening and ~~the~~ said first conductive layer of ~~the via~~ said hole;

forming a pattern of a conductive spring unit on ~~the~~ said seed layer ~~as to overlap all the via~~ overlapping said hole and ~~the~~ said opening;

forming a conductive tip portion on a leading end of ~~the spring unit~~ said conductive spring unit;

etching ~~the~~ said seed layer that is not covered with ~~the spring unit~~ said conductive spring unit; and

etching ~~the~~ said silicon substrate under ~~the spring unit~~ said conductive spring unit.

Claim 7 (Currently amending): The method of claim 6, wherein ~~said~~ the step of forming the said pattern of ~~the spring unit~~ said conductive spring unit comprises:

forming a first pattern of a photoresist having a window overlapping all ~~the via of~~ said hole and ~~the~~ said opening; and

forming a second pattern of a second conductive layer for ~~the spring unit~~ said conductive spring unit, said second pattern being only in the said window ~~of the~~ photoresist.

Claim 8 (Currently amending): The method of claim 7, wherein ~~the spring unit~~ said conductive spring unit is formed by a plating method.

Claim 9 (Currently amending): The method of claim 8, wherein ~~the spring unit~~ said conductive spring unit is made ~~of any one of~~ from a material being selected from the group consisting of copper, nickel, nickel-tungsten, nickel-chromium, tungsten ~~and various kinds of~~ a plating alloys alloy, and any combinations thereof.

Claim 10 (Currently amending): The method of claim 6, wherein ~~said the step of forming the tip portion~~ said conductive tip portion comprises:

forming a pattern of a photoresist having a window exposing a leading end of ~~the spring unit~~ said conductive spring unit, said pattern being on ~~the spring unit~~ said conductive spring unit and ~~the~~ said seed layer; and

forming a second pattern of a ~~third~~ second conductive layer for ~~the tip portion~~ said conductive tip portion only in the said window of the said photoresist.

Claim 11 (Currently amending): The method of claim 10, wherein ~~the tip portion~~ said conductive tip portion is formed by a plating method.

Claim 12 (Currently amending): The method of claim 11, wherein ~~the tip portion~~ said conductive tip portion is made of ~~any one of~~ a material being selected from the group consisting of copper, nickel, nickel-tungsten, nickel-chromium, tungsten, and various kinds of a plating alloy, and any combinations thereof alloys.

Claim 13 (Currently amending): The method of claim 6, wherein ~~the~~ said silicon substrate under ~~the spring unit~~ said conductive spring unit is isotropically etched.

Claim 14 (Currently amending): The method of claim 13, wherein ~~the~~ said silicon substrate is isotropically wet-etched using ~~any one of~~ an etching solution being selected from the group consisting of solutions including tetramethylammonium hydroxide (TMAH), KOH, ~~and~~ ethyl diamine pyrocatechol (EDP), and any combinations thereof.

Claim 15 (Currently amending): The method of claim 13, wherein ~~the~~ said silicon substrate is dry-etched by a reactive ion etching and an inductively coupled plasma etching.

Claim 16 (Currently amending): The method of claim 6, wherein ~~said~~ the step of forming the first conductive layer comprises:

putting ~~the~~ said silicon substrate having ~~the via~~ said hole into an electrolyte for ~~the~~ said first conductive layer;

filling ~~the via~~ said hole with ~~the~~ said electrolyte by applying ~~a certain~~ a desired amount of pressure to ~~the~~ a surface of ~~the~~ said electrolyte; and

leaving ~~the~~ said first conductive layer only in ~~the~~ said hole by pulling out ~~the~~ said silicon substrate from ~~the~~ said electrolyte and polishing ~~both surfaces of~~ the said silicon substrate.

Claim 17 (Currently amending) The method of claim 16, wherein ~~the~~ said electrolyte is selected from the group consisting of ~~any one of an~~ an electrolyte ~~including~~ having lead, an electrolyte having tin, an electrolyte with solder, and any combinations thereof ~~lead/tin and electrolyte including solder~~.